

Unit 5

Day 2

Factoring Using Integers - Part 2

## MORE CHALLENGING FACTOR BY GROUPING

1)  $p^3 - 4q^2 + p^2 - 8q^3 =$

$$p^3 - 8q^3 - 4q^2 + p^2$$

$$(p^3 - 8q^3) + (p^2 - 4q^2)$$

$$(p - 2q)(p^2 + 2pq + 4q^2) + (p - 2q)(p + 2q)$$

$$(p - 2q)(p^2 + 2pq + 4q^2 + p + 2q)$$

## MORE CHALLENGING DIFFERENCE OF SQUARES

$$1) \quad (3x-1)^2 - 49 =$$

$$(3x-1-7)(3x-1+7) \\ (3x-8)(3x+6)$$

$$x^2 - y^2 \\ (x-y)(x+y)$$

$$2) \quad (a+2)^2 - (2b+4)^2 =$$

$$(a+2+2b+4)(a+2-(2b+4))$$

$$(a+2b+6)(a-2b-2)$$

TRIAL AND ERROR?? NOT REALLY.

$$x^2 + 11x - 60 =$$

# FACTOR BY GROUPING

1)

$$6a^2 - 23ab + 21b^2 =$$

$$\begin{array}{r} 12b \\ \hline 2 \quad 63 \end{array} \quad \begin{array}{l} (6a^2 - 9ab) + (14ab + 21b^2) \\ 3a(2a - 3b) + 7b(2a - 3b) \\ \hline (2a - 3b)(3a - 7b) \end{array}$$

2)

$$24y^2 - 31y - 15 =$$

# HOMEWORK

Wksht #2 AND pg 42: 17-28